

Work Order ID 48243

Friday, June 26, 2009 8:58:01 AM



Page 1

Item ID: D3363-1

Accept



Setup Start



Revision ID: C

Stop



Item Name: Console

Start Date: 7/15/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 8/3/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3363	Rev C								

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3363 ***CUT AT 45 DEG GRAIN DIRECTION*****

☐Dwg Rev: C ☐ Prog Rev: C ☐ 2-Deburr if necessary

HB 9-7-2

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

HB 9-7-2

(4)

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

- Sorlozka (F4)

Work Order ID 48243

Friday, June 26, 2009 8:58:01 AM



Page 2

Item ID: D3363-1

Accept



Setup Start



Revision ID: C

Stop



Item Name: Console

Start Date: 7/15/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 8/3/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
	NC BRAKE								
Brake NC	Memo	0.00							
Brake NC	Deburr <input type="checkbox"/> Form as per Dwg D3363								
140		0.00							
	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							
Quality Control									
150		0.00							
	Large Fab								
Large Fab	Memo	0.00							
Large Fab	Weld using DT8790 as per Dwg D3363 and QSI 004								

07/07/21

⇒ 507622

⊕⊗

Pl 09.07.23

Work Order ID 48243

Friday, June 26, 2009 8:58:01 AM



Page 3

Item ID: D3363-1

Accept



Setup Start



Revision ID: C

Stop



Item Name: Console

Start Date: 7/15/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 8/3/2009 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

10 0907.24

170

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

1- inspect part with DT8790 jig

2) 502424

(X)

6

FOR CHEN CONW. COART + QC 3

See old w/o

PTO →

180

Identify as per dwg & Stock Location: 180A

0.00



Packaging

Memo

0.00

Packaging

12 9/7/24 (4)

Friday, June 26, 2009 8:58:01 AM

Item ID: D3363-1

[illegible][illegible][illegible][illegible]

██████████
██████████
██████████
██████████
██████████

Abstract

[illegible]

**Insp.
Stamp**

1. The first step in the process is to identify the problem. This involves gathering information about the situation and understanding the needs of the stakeholders involved.

2. Once the problem is identified, the next step is to develop a plan. This involves setting goals, identifying resources, and determining the steps that need to be taken to address the problem.

3. The third step is to implement the plan. This involves putting the plan into action and monitoring progress. It is important to stay flexible and adjust the plan as needed.

4. Finally, the fourth step is to evaluate the results. This involves assessing the effectiveness of the plan and determining whether the problem has been solved. If not, the process may need to be repeated.

0.00

09607128 1A

12 91.87.24

Picklist Print

Page 1

Friday, June 26, 2009 8:58:00 AM

Work Order ID: 48243



Parent Item: D3363-1RevC



Parent Item Name: Console



Start Date: 7/15/2009

Required Date: 8/3/2009

Comments:

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M6061T6S.063  6061-T6 .063 Sheet		Purchased	No			100	sf	0.0000	9.6842 			

m 110551 18 9-7-0

Date: Thursday, 28/05/2009 9:11:57 AM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : CONSOLE
Job Number : 48243	
Estimate Number : 10910	
P.O. Number :	Part Number : D33631
This Issue : 28/05/2009 S.O. No. :	Drawing Number : D3363 REV C
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SMALL /MED FAB	Drawing Revision : C
Previous Run : 46179	Material :
Written By :	Due Date : 04/06/2009 Qty: 4 Um: Each
Checked & Approved By : <u>JUL 09.05.28</u>	
Comment : Est: B 05.09.09 Remove c'sink rivet holes and add welding stepK J/JLM Est: C 06.11.15 waterjet EC Est Rev:D 08-07-14 add comment in QC5 inspection DD verified by:ec	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	M6061T6S063	6061-T6 .063 Sheet
-----	-------------	--------------------



Comment: Qty.: 2.4150 sf(s)/Unit Total : 9.6600 sf(s)
 6061-T6 .063 thick aluminum Sheet
 Batch: 110551 1B 9-7-2

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET
 1-Cut as per Dwg D3363 ***CUT AT 45 DEG GRAIN DIRECTION*****
 Dwg Rev: C
 Prog Rev: C 1B 9-7-2
 2-Deburr if necessary 1B 9-7-2

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

809107102 (X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 28/05/2009 9:11:57 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: CONSOLE

Job Number: 48243

Part Number: D33631

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

5.0	BRAKE NC	NC BRAKE
-----	----------	----------



Comment: NC BRAKE

Deburr

Form as per Dwg D3363

SA 09/07/21

④

6.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

7.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
-----	-------------	------------------------------



Comment: LARGE FABRICATION RESOURCE 1

Weld using DT8790 as per Dwg D3363 and QSI 004

8.0	QC9	VISUAL WELDING INSPECTION
-----	-----	---------------------------



Comment: VISUAL WELDING INSPECTION

9.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

1- inspect part with DT8790 jig

10.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
------	-----------------	----------------------------



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BR 09-07-27

11.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
------	-----	---



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

SA 09/07/21

12.0	PACKAGING 1	PACKAGING RESOURCE #1
------	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 28/05/2009 9:11:57 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: CONSOLE

Job Number: 48243

Part Number: D33631

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 48243
Description: Console		Part Number: D3363-1
Inspection Dwg: D3363	Rev: C	Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	.100	*			
Ø0.128	+0.005/-0.001	.131	*			
Ø0.469	+0.006/-0.001	.471	*			
14.41	+/-0.030	14.41	*			
14.097	+/-0.010	14.097	*			
12.409	+/-0.010	12.409	*			
11.354	+/-0.010	11.356	*			
10.706	+/-0.010	10.709	*			
10.081	+/-0.010	10.086	*			
4.331	+/-0.010	4.336	*			
3.706	+/-0.010	3.708	*			
3.058	+/-0.010	3.058	*			
2.004	+/-0.010	2.003	*			
2.366	+/-0.010	2.366	*			
3.100	+/-0.010	3.103	*			
5.040	+/-0.010	5.038	*			
5.415	+/-0.010	5.414	*			
2.25	+/-0.030	2.249	*			
19.965	+/-0.010	19.965	*			
20.366	+/-0.010	20.374	*			
21.318	+/-0.010	21.318	*			
22.90	+/-0.030	22.90	*			
0.315	+/-0.010	.319	*			
3.706	+/-0.010	3.706	*			
4.025	+/-0.010	4.028	*			
7.206	+/-0.010	7.207	*			
1.75	+/-0.030	1.749	*			
10.387	+/-0.010	10.391	*			
19.590	+/-0.010	19.590	*			

DART AEROSPACE LTD		Work Order: 48243
Description: Console		Part Number: D3363-1
Inspection Dwg: D3363 Rev: C		Page 2 of 2

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
18.990	+/-0.010	18.990	✓			
1.80	+/-0.030	1.801	✓			
6.390	+/-0.010	6.390	✓			
5.790	+/-0.010	5.796	✓			
4.475	+/-0.010	4.475	✓			
4.100	+/-0.010	4.094	✓			
2.725	+/-0.010	2.721	✓			
2.00	+/-0.030	2.002	✓			
6.363	+/-0.010	6.359	✓			
10.737	+/-0.010	10.740	✓			
11.206	+/-0.010	11.211	✓			
3.206	+/-0.010	3.206	✓			
3.675	+/-0.010	3.672	✓			

Measured by: JB	Audited by: J	Prototype Approval:	N/A
Date: 9-7-2	Date: 09/07/02	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue	KJ/DD	JB

DART

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

REV. C

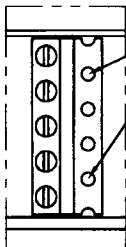
DESIGN	DRAWN BY	DRAWING NO.	SHEET 1 OF 3
P11	PH	D3363	
CHECKED	APPROVED	TITLE	SCALE
JS	JS	CONSOLE ASSEMBLY	1:5
DATE	07.01.26		

A	04.11.29	NEW ISSUE
B	05.03.28	INCREASE WIDTH BY 0.125
C	07.01.26	T'DRILL DZUS RAIL, WIDEN BASE CUTOUT

RELEASED

07.06.04

TRANSFER DRILL #30 FROM D3362-1 DZUS RAIL THROUGH D3363-1 CONSOLE (TYP 4 PLACES) C'SINK (#0.225 X 100") FROM TOP SIDE OF CONSOLE



DETAIL C
(SCALE 1:2)

A



C'SINK THIS SIDE (REF)

A

INSTALL D3361-1 & D3362-1 USING MS20426AD4-6 RIVETS (TYP 9 PLACES)

TRANSFER DRILL #30 FROM MATING PARTS THROUGH #40 HOLES IN D3363-1 CONSOLE (TYP 49 PLACES) C'SINK (#0.225 X 100") FROM CONSOLE TOP SIDE

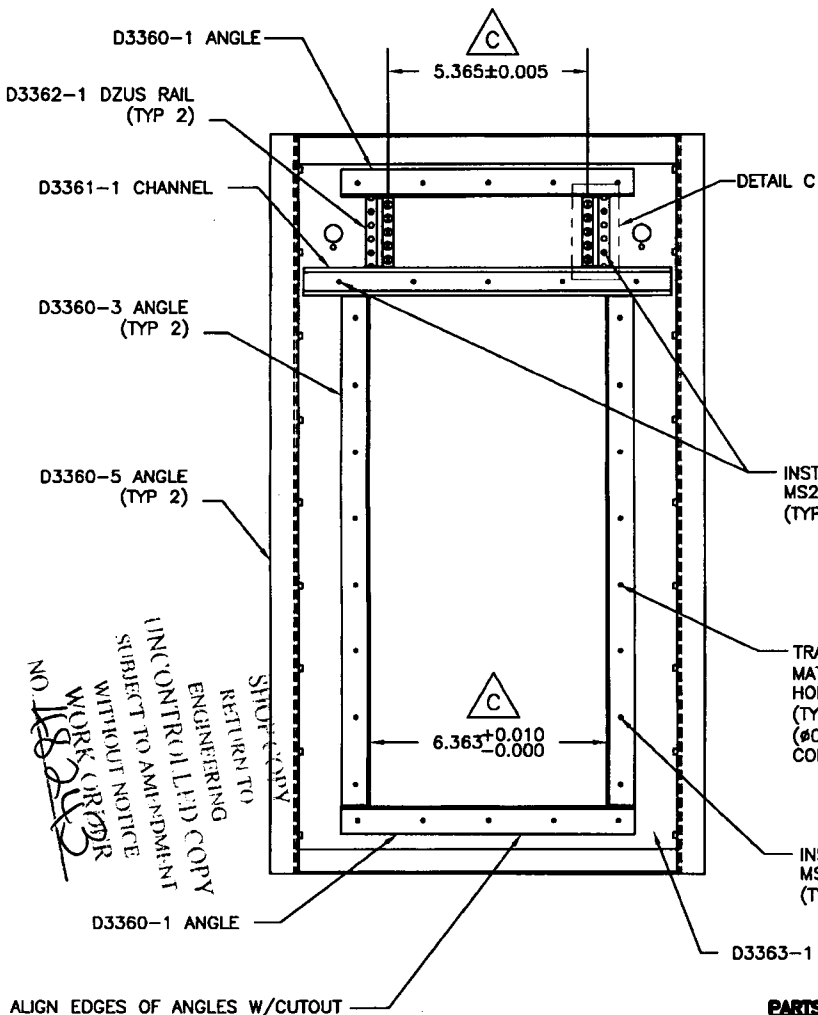
INSTALL D3360-1/-3/-5 ANGLES USING MS20426AD4-5 RIVETS (TYP 44 PLACES)

D3363-1 CONSOLE

PARTS LIST FOR D3363-041 CONSOLE ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
-041		
X	D3363-041	CONSOLE ASSEMBLY
2	D3360-1	ANGLE
2	D3360-3	ANGLE
2	D3360-5	ANGLE
1	D3361-1	CHANNEL
2	D3362-1	RAIL
1	D3363-1	CONSOLE
44	MS20426AD4-5	RIVET
9	MS20426AD4-6	RIVET

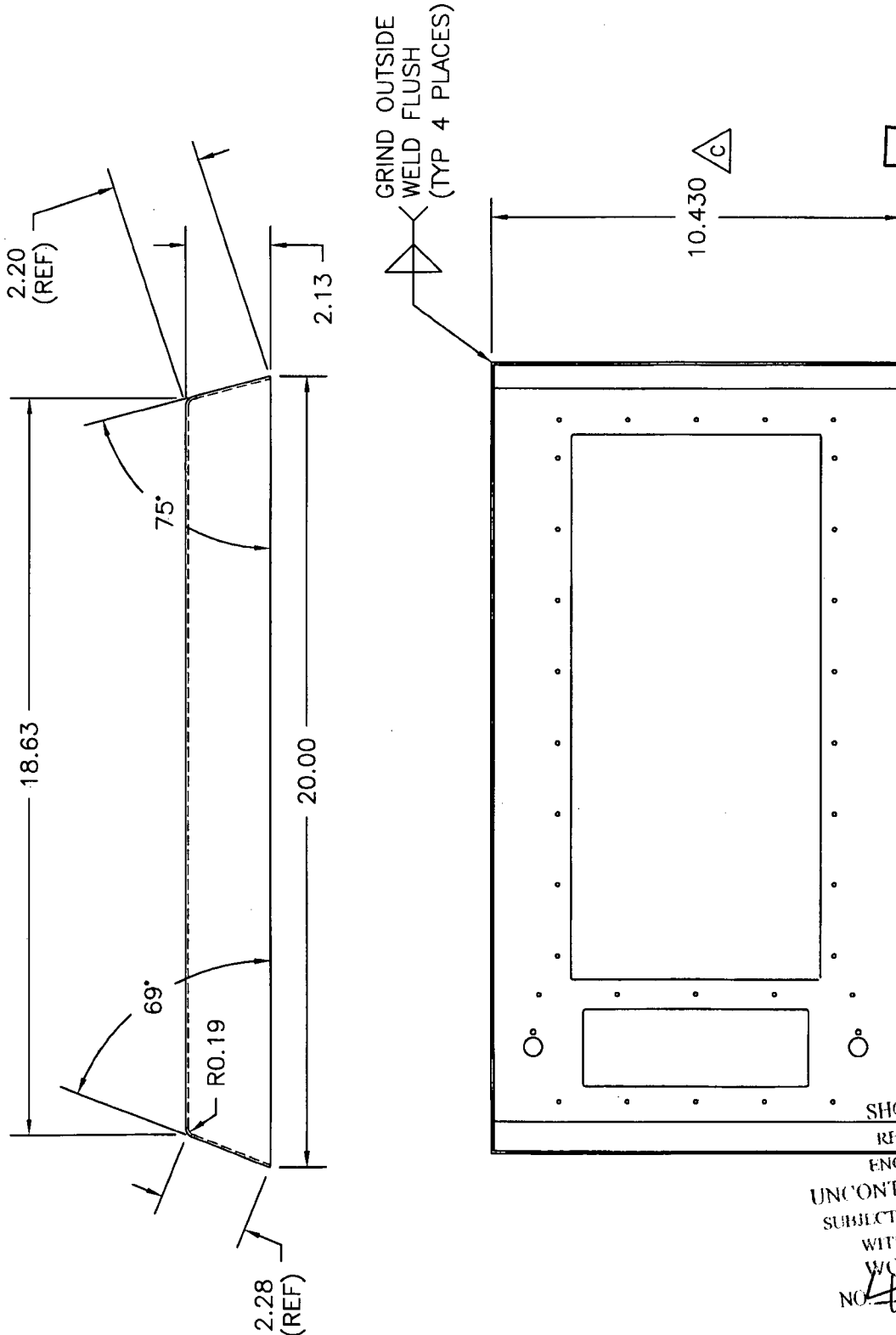
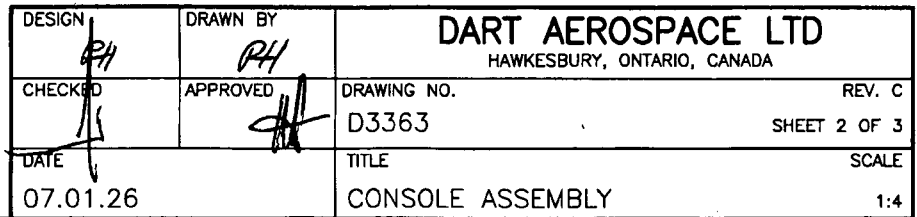
VIEW A-A FROM UNDER CONSOLE ASSEMBLY



D3363-041 CONSOLE ASSEMBLY

- ASSEMBLE IN ACCORDANCE WITH DART QSI 002
- IDENTIFY WITH DART P/N D3363-041 AND B/N BXXXXX USING FINE POINT PERMANENT INK MARKER
- FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1

SHOOT COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 118252



07.06.04

D3363-1 BEND DETAIL

020003-1 BOND DETAIL
(MAKE FROM D3363-1F FLAT PATTERN)

• SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 48243

D3363-1 CONSOLE

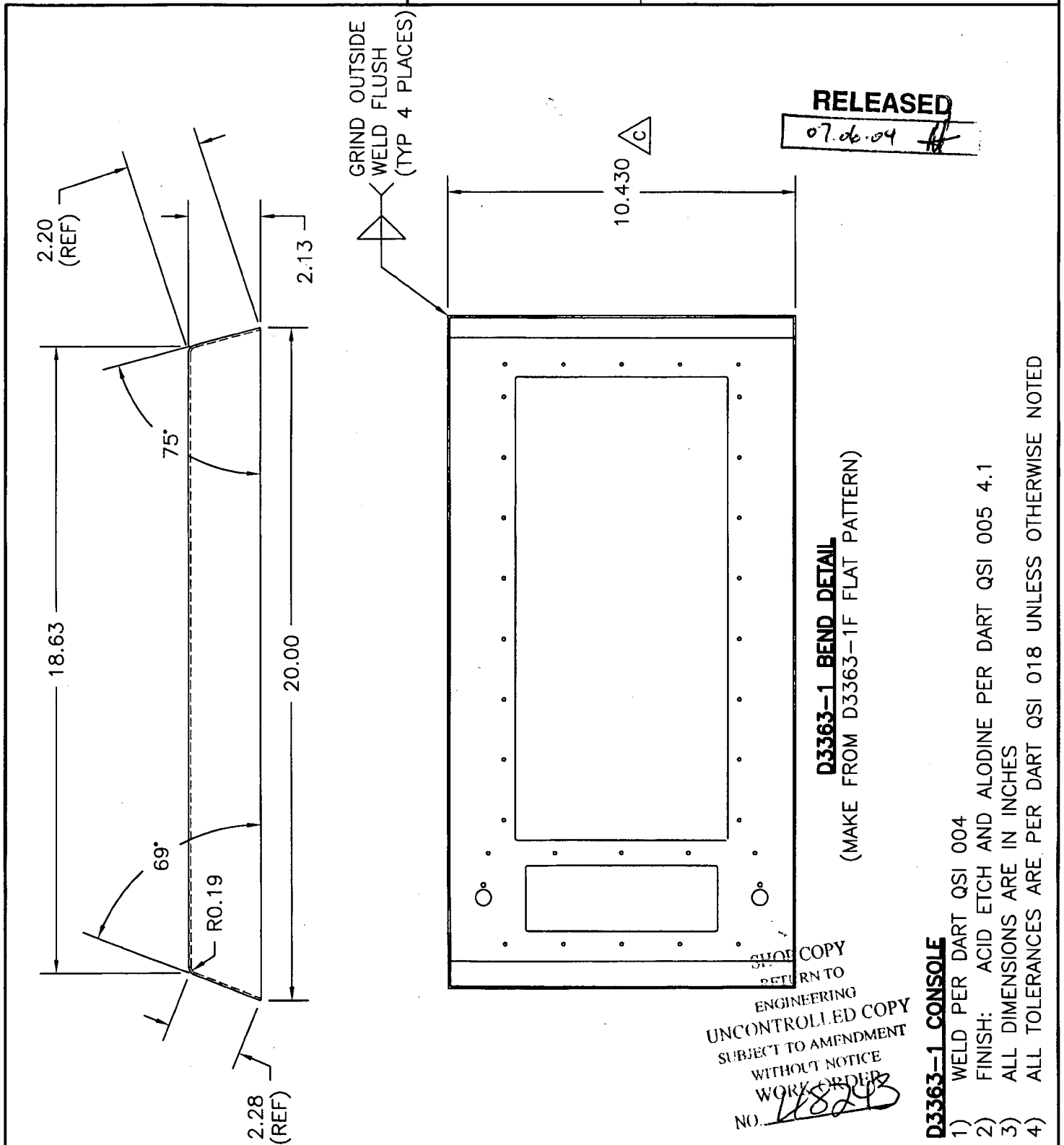
- 1) WELD PER DART QSI 004
- 2) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>RH</i>	DRAWN BY <i>RH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>JS</i>	APPROVED <i>JS</i>	DRAWING NO. D3363	REV. C SHEET 2 OF 3
DATE 07.01.26	TITLE CONSOLE ASSEMBLY		SCALE 1:4



Copyright © 2004 by DART AEROSPACE LTD

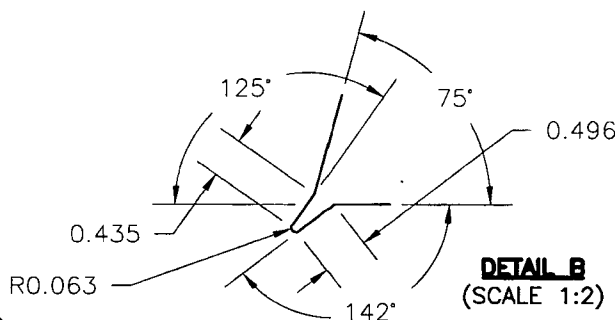
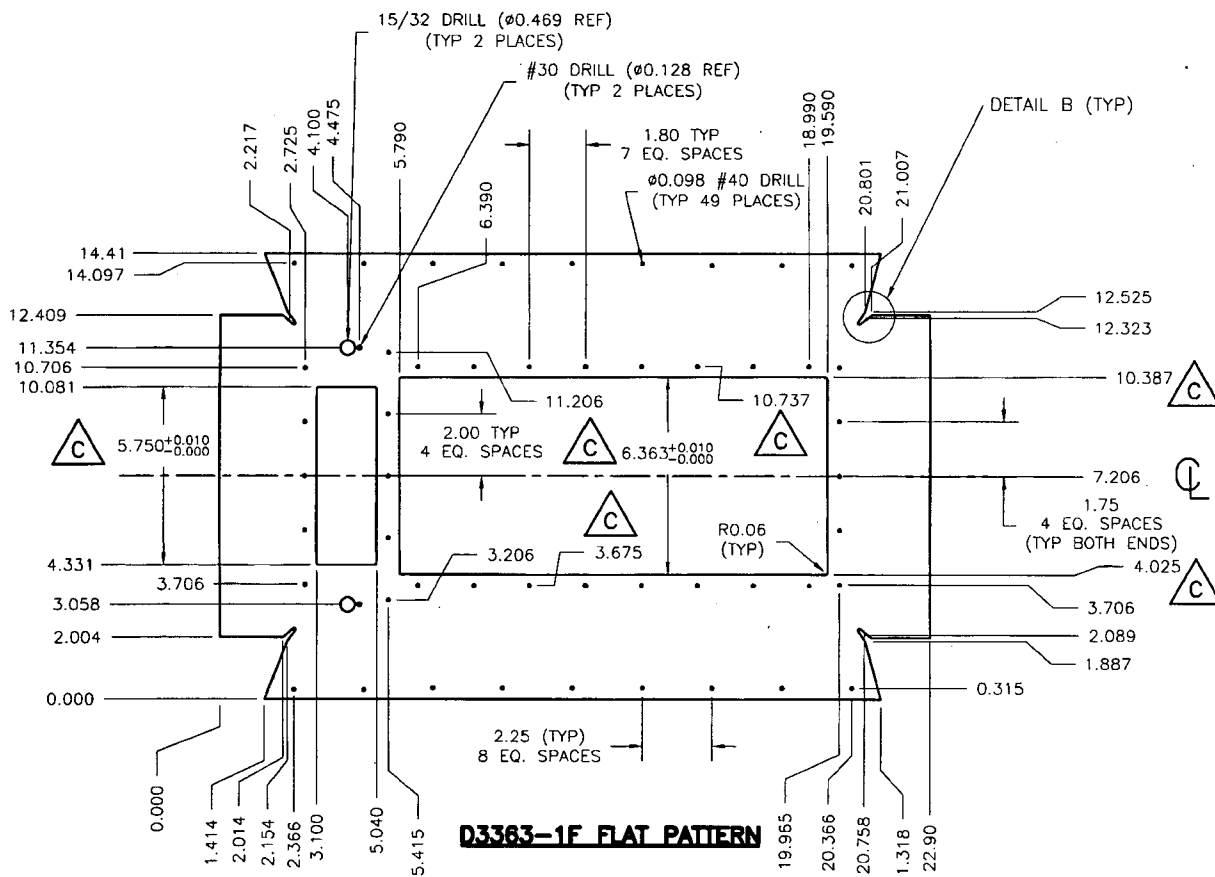
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN	24	DRAWN BY	GH	DART AEROSPACE LTD
CHECKED	3	APPROVED		HAWKESBURY, ONTARIO, CANADA
DATE	07.01.26	TITLE	D3363	REV. C
		CONSOLE ASSEMBLY		SHEET 3 OF 3
				SCALE 1:6

RELEASED

07.06.04



D3363-1F CONSOLE (FLAT PATTERN)

- 1) MATERIAL: 6061-T6/T651 ALUMINUM 0.063 THICK
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF DART SPEC M6061T6S.063)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) PART IS SYMMETRICAL ABOUT CENTERLINE

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 18200

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.